

GLOBAL THOUGHT LEADERS PREDICTIONS FOR MOBILITY 2021

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Electronomous

The International Mobility Summit



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**MOBILITY
SUMMIT**

WITH CONTRIBUTIONS BY





END OF YEAR NOTE.

Thank you to all those who took part in Electronomous 2020 – The International Mobility Summit. (Virtual)

OUR MISSION THIS YEAR

To Create an Inspirational & Engaging Platform for Global thought leaders in the International Mobility & Smart City community.

3000+ of you joined the conversation from over 80 different countries during the course of the two day event this year. We appreciate it doesn't quite have the same feel as a live, in-person event but it created a platform for business to continue and ensured that these important Mobility conversations continued.

The Covid pandemic has further high-lighted the importance of Mobility and Smart City technology. I think if we are to take one message from this year's event it would be collaboration. In order for us to accelerate the progress of Smart and Sustainable Transport in our cities, technology providers, transport authorities, mobility companies, OEM's and Policy makers must continue to collaborate. Let's not waste the opportunity to #buildbackbetter.

To our partners and sponsors- this isn't possible without you and we look forward to delivering for you again on future events.

A special congratulations must go to the inaugural winners of Rising Stars 2020. Huge Congratulations to Duckt, BitSensing and Blu Smart on their wins!

We are delighted to announce a series of Online events, (webinars, workshops and roundtables, & Investment brokerage events) will be coming in the new year. Please do reach out to us if you or your company would like take part. You can reach out to us at getinvolved@electronomous.com

Our plans to host live events in 2021 are currently underway and we hope to make an announcement soon regarding these.

Finally, I would like to extend my thanks to all 80+ speakers that dialed in from across the globe and shared their incredible knowledge this year. As we wrap this year, we have put together some predictions with the assistance of some Global industry thought leaders. We hope some of these predictions will assist you to plan for a more successful 2021.

Let's make 2021 the year we **#buildbackbetter.**

Wishing you all the best for the year ahead.

Keith Whelan
Event Director.
[#electronomous](#)



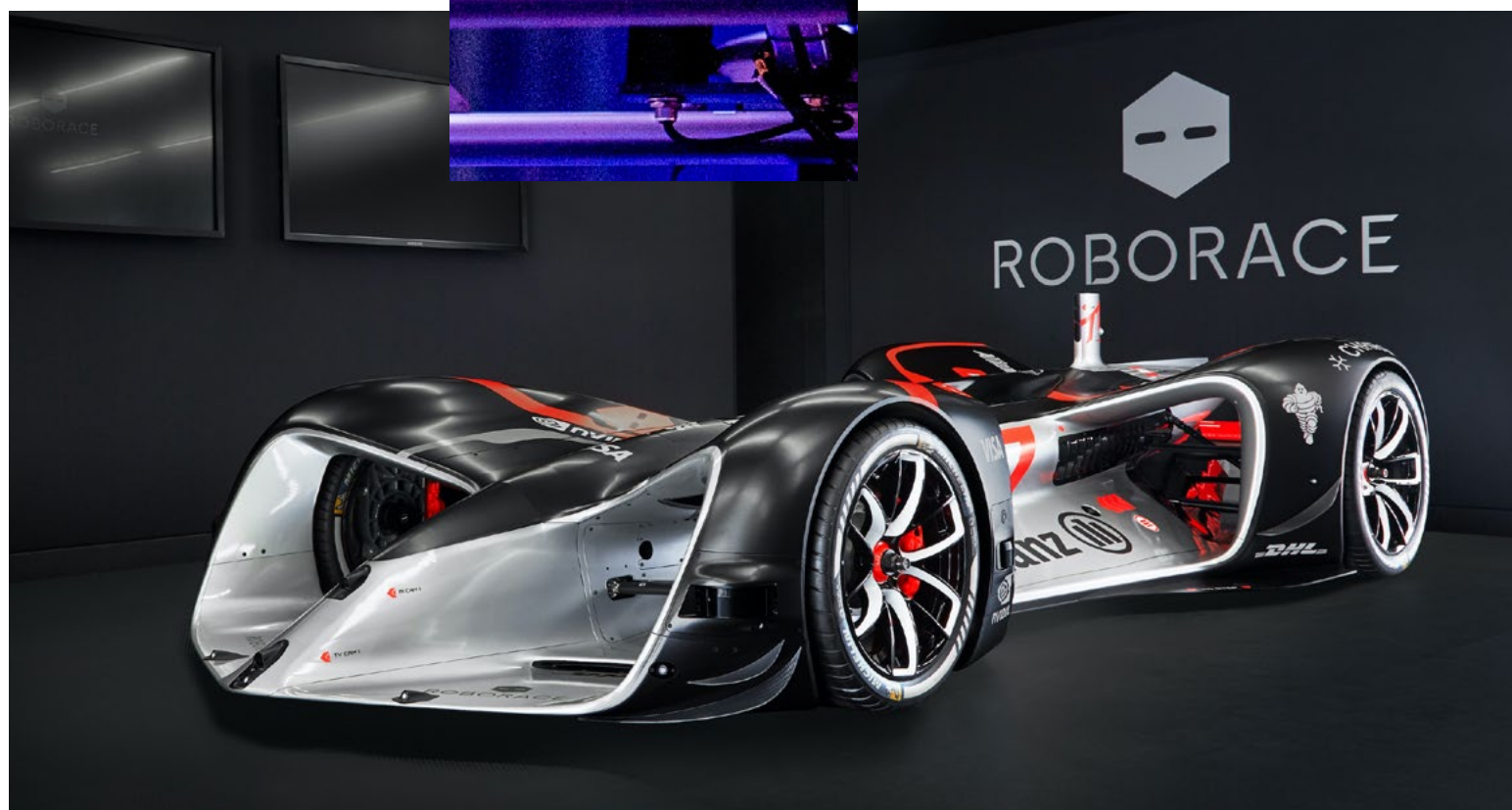
David
Coleman

Director Global Automotive
Practice for Deloitte

The past year has been unique in many respects. Smart Cities have taken advantage of the crisis, and the reduced commuting that has resulted, to overhaul their Mobility and transportation agenda. Leading Smart Cities have converted formerly congested streets into bike lanes, created pedestrian-only zones, set up EV-only districts and charging networks, reduced speed limits on a citywide basis, and brought forward mobility initiatives previously planned for future years.

Looking forward, a key battle in Mobility will play out between OEMs and tech giants to 1) own more of the mobility value chain, 2) control the customer's end-to-end experience, and 3) access and monetize the customer's profile and usage data. OEMs are innovating with fully connected hardware and service concepts, which offer a portfolio of digital and driving-related enhancements.

Meanwhile, tech giants now provide embedded vehicle operating systems, which deliver an enhanced UX and improved application functionality directly to the customer. The outcome of this Mobility battle will influence development, pricing, and options for customers going forward. The coming years will be the most exhilarating yet for Smart Cities and Mobility, with advances from OEMs, Tech Giants, city governments and third parties. We can look forward to new and exciting hardware and digital innovations, which together can transform the mobility experience in Smart Cities and beyond.



PREDICTIONS FOR MAAS RESP. THE MOBILITY ECOSYSTEM

1. Integration Standards: Levelling the Playing Field

Implementing data and integration standards is an important and often overlooked aspect of successful MaaS systems. At Trafi, we think effective MaaS networks are defined by their diversity, meaning the number of players from across the mobility spectrum that they involve. Integration standards are great equalizers that reduce costs and barriers to entry, save time and allow companies and cities alike to provide better services.

2. MaaS for the Masses: Small- and Medium-Sized Cities Embrace Mobility-as-a-Service

Inspired by success stories in larger urban areas, small- to medium-sized cities are seeing the value in expanding their MaaS systems, freeing up congested streets and offering citizens a variety of mobility options to choose from. At the same time, the technology these MaaS systems are built on is advancing at break-neck speeds, allowing for easy adoption and effectively reducing barriers to entry. Combining these factors, it's safe to assume that many smaller cities are poised to start building out their MaaS networks in 2021.

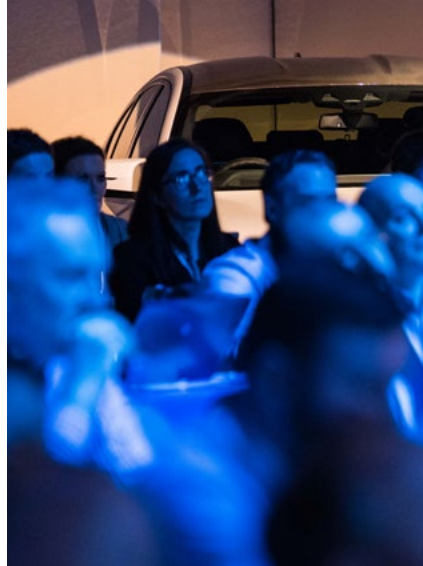
3. Connected Cities: The Future of MaaS

We've arrived at an exciting era for MaaS. Until recently, MaaS systems were typically designed solely with downtown urban areas in mind. Now, MaaS is expanding its limits: the introduction of intercity systems like the Trafi-powered yumuv app in Switzerland allows multiple city networks to be connected with one another and accessed through a single app. Having "one app to rule them all" - particularly one that functions on a regional scale - has major benefits for users, offering them flexibility, freedom and a seamless travel experience.



Christof
Schminke

Managing Director
Commercial - Trafi GmbH



Dr. Timo Möller

Partner | Head of McKinsey
Center for Future Mobility



2020 has been a special year in mobility. Next year will also bring much uncertainty but one thing is definite: mobility will continue to evolve in exciting ways.

Changing consumer preferences and a greater focus on sustainability

When the COVID-19 pandemic is controlled consumers will be more willing (again) to use public transport and other forms of shared mobility. That is what consumers across the globe are telling us in our regular surveys as well as real-life data is indicating in urban context. We anticipate that sustainability will continue to be an important consideration, with more consumers opting for electric and micromobility solutions, especially in cities. Global car sales may continue to decline from their 2019 peak as more consumers consider alternatives to car ownership.

Continued technology disruptions and widely available innovations

Despite the pandemic, many companies have continued to invest in disruptive mobility technologies, including autonomous technology, connectivity, EVs, and other areas. These businesses have the

support of capital markets, and many special purpose acquisition companies have recently made some successful deals. In 2021, disruptors will exert their presence more strongly. While they may compete with traditional companies in some areas, they will cooperate with them in others. Automotive technology will continue to evolve in 2021 and consumers will have greater access to innovations. For instance, 60 percent of premium OEMs plan to have some form of level 4 automation in their vehicles by 2025. Vehicle electrification will also continue, and innovations could drive EV costs down even further. (The total cost of ownership for BEVs has already reached parity with internal-combustion vehicles in the C-segment). For technology overall, we expect that software will increasingly become the key differentiator for vehicles.

Regulation will continue to enable the mobility revolution. Regulators will continue to play a major role in helping the mobility sector recover from the pandemic. Many mobility solutions will have an intense local focus and consider regional variations related to the pandemic, transportation preferences, and city layouts.

Continuing the trend seen in 2020, many regulators will focus

on environmental issues when enacting mobility guidelines. For instance, European officials are planning to create more stringent carbon-reduction targets to meet the Paris Agreement about climate change. Many governments are also creating new incentives to boost the sales of carbon-free means of transport and others are issuing guidelines with similar goals. Already, more than 150 cities in Europe restrict access to their centers to reduce pollution and carbon emissions.

Long-term mobility shifts

Over the next decade, the changes in consumer preferences, technology, and regulations will contribute to major mobility shifts. Regional variations will continue to be apparent because of differences in government response, the intensity of the pandemic, and other factors. For instance, private-car use may drastically decrease in some major European cities. In North America, by contrast, this form of transport will see little change because there are limited incentives to change mobility behavior. Likewise, consumers in greater China may increasingly rely on public transit and rail but major cities in South Asia will see little change in this area.



Rob Fowler

Chief Executive Officer
of Volta Trucks

Acceleration in environmental and air pollution awareness

During the pandemic lockdowns, we all noticed the improvements in air quality with the reduction of traffic movement. In November, the UK Government led the world in announcing an acceleration in the ban of internal combustion cars and vans to 2030, which Volta Trucks supported, and called for the ban to extend to commercial vehicles too. 2021 will also see the COP26 gathering of world leaders, meeting to set the agenda for the next stage of tackling the climate emergency. All of these milestones

point to an acceleration in mainstream awareness of global warming and air pollution and, vitally importantly, a willingness not to just talk positively then procrastinate, but to take action. We all need to change our approach, behaviours and purchasing to help improve the world around us. A sustainability-first approach to mobility will transform the environments we live and work in. We still need to do much of what we do today, but we need to do it in a far more environmental way, always considering the impact on our surroundings. We must make these coming few years count in the drive towards zero emissions.

The ongoing demise of high-street retail

The coronavirus pandemic has accelerated the demise of many of the great high-street brands, which is of course very difficult for those personally affected. A combination of cash rich, time poor families that don't 'go shopping' in their masses as they used to, and the unit economics of cheap delivery costs and the major reduction in corporate overheads, have accelerated the exponential rise of online shopping. I don't see any short-term reversal of this.

This trend away from high street shopping, further enhanced by the reduction in commuter's spending in city centre workplaces, will accelerate a complete reappraisal of the future role of cities. For retail, high streets need to transition from being a function to an experience, and draw buyers back in to attractive destinations. This could be accelerated with the growth of localism, with local communities supporting local business, and the rise of niche boutique stores, rather than the large retail chains of today. Another possible outcome could be a mass redevelopment of current retail and office space into residential space, to deal with the chronic shortage of low-cost housing that exists. This could change the face of the Smart City of the future completely, making them far more focussed around human needs than commercial or corporate needs. That said, as the producer of a full-electric large commercial vehicle that's specifically designed for inner city distribution, this transition could have a positive effect on our business model, with many more residents to serve with their online deliveries.



VOI TECHNOLOGY TRENDS FOR 2021



Richard
Corbett

Regional General Manager
of UK, Ireland and
Benelux for Voi

Covid and a slow return to a new normal

In recent days, a coronavirus vaccine has been approved for implementation, but it's likely that the positive sentiment of the vaccine will outpace the actual speed of rollout into the mainstream, that would allow the world to return to a new normal. It's likely that mass immunization will take most of 2021, by which time the current flexible working practices, the acceleration of online retail and the avoidance of public transport will have become so embedded as to be very difficult to change. This will fundamentally and irreversibly change our city centre environments, meaning less commuters into city centres and the consequent demise of the economies that serve these communities, such as coffee shops, news agents etc. However, there will be upsides for mobility,

with the drop in commuter congestion, and the onward improvements in air quality. Air pollution will likely be enhanced if the utilisation of public transport continues to drop, with a further increase in personal mobility, like e-bikes and e-scooters.

Pre and Post-Covid behaviour changes will continue to drive people to adapt new and green modes of transport

The poor air quality we breathe in our cities has been an increasing problem. With a fifth of the country's gas emissions coming from road transport back in 2017 and up to six per cent since 1990, according to a study by the National Office of Statistics, the climate crisis was the first precursor of major changes in the way we move in our cities. Following the start of the pandemic, these changes were

accentuated further as people are increasingly looking for more active and socially distanced modes of transport that don't evolve being cramped inside public transport or stuck in traffic.

As e-scooter trials continue, shared e-scooters will become an integral part of people's lives, whether it is to commute, shop, visit friends and family or just to enjoy the surrounding area. According to a recent Voi user survey, 14 percent of rides replace cars, reducing pollution and congestion. These electric vehicles not only take up less space than motorised vehicles, but they can dramatically improve our urban landscape, freeing up space previously occupied by cars that can be transformed to benefit local communities.

Regulation will lead to better riding and parking infrastructure

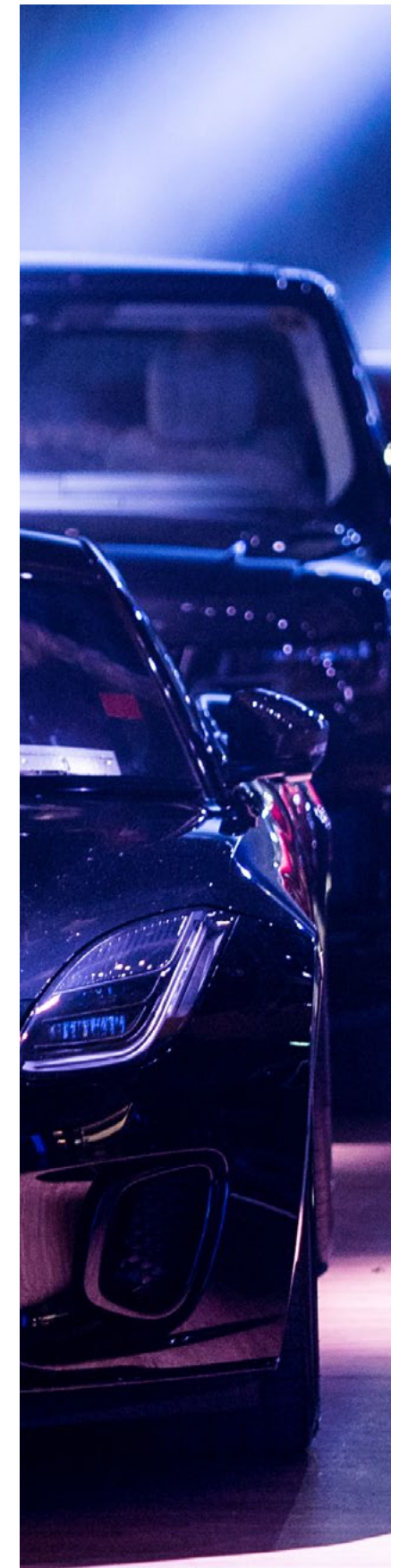
Having launched the first trial in the UK market three months ago, we have seen increasing adoption of e-scooters as a new safe and accessible mode of transport. During these few months, 250,000 rides were taken using our shared scooters, and 300,000 miles were ridden across the eight cities and towns where we are present, demonstrating the need and demand for the service. As demand for e-scooters grows, so does the need for regulation, which has been at the core of Voi's way of working from day one. With regulation in place, micro-mobility can play a major role in the shift towards electric, shared and multimodal transport. Regulation will not only make it easier for cities to promote and manage new modes of transport; it will also

enforce new and better standards for operators, increasing safety and overall trust. Most importantly, regulation will lead to better riding and parking infrastructure, through the creation of more cycling lanes and parking alternatives, reducing clutter and creating an easy to navigate and more inclusive city for all, and overall contributing to Vision Zero.

E-scooters will become even safer and more sustainable

As technology evolves, electric scooters will become smarter and safer. At Voi, we recently started a collaboration with Dublin-based micro-mobility start-up Luna, to bring AI and computer vision to our scooters. These and other innovations are gradually being introduced in vehicles, allowing riders and e-scooters to be able to respond better and faster to its surrounding environment, pre-empting risks and making e-scooters an even safer mode of transport for riders and other road users, particularly vulnerable ones. Improvements are not restricted to e-scooter software; they will span across hardware as well, with longer vehicle lifespans to guarantee minimal environmental impact. Voi is carbon-neutral since January 2020, and we are committed to continuing to adopt a circular economy approach to reduce the impact of our scooter and service.

These improvements should be complemented by better and safer infrastructure to ensure the safety of all road users, in line with Vision Zero, which like Voi was in Sweden. For additional content, please visit: <https://www.voiscoters.com/blog/>



Augustin Friedel is a well-known shared mobility expert with passion for micro mobility, mobility on demand service and public private partnerships. Some of his projects and reports can be downloaded [here](#). After launching Uber in Germany in 2013, Augustin worked for companies like Blacklane, Rocket Internet and Deutsche Bahn subsidiary ioki. He is currently responsible for intermodality service topics at Volkswagen AG. The views expressed in this interview are his personal ones and not linked to any Volkswagen activity.

If it comes to mobility, the year of 2020 was a rollercoaster for shared mobility and adjacent areas. After a strong start at the beginning of the year, the industry was hit hard by the COVID-19 pandemic. Modes like ride hailing have seen dramatic drops in demand of up to 90% and are slowly recovering. After a first panic phase, shared micro mobility is valued by users and city authorities as a convenient and safe form of transportation. The situation in most markets is still volatile, so what could be potential trends and developments for 2021?

#1: Shared micro mobility on the rise

Shared micro mobility operators will expand in more markets and might come up with new products and services. The leading

Augustin Friedel



players in Europe, like VOI and Tier have full pockets after their latest funding rounds. I would predict that this will lead to an increase competition in medium and smaller cities in Europe, as it already started in Germany. The providers will also intensify to optimize their hardware, with focus on safety, charging and more cost-efficient operations. New product extensions like charging networks, multiple modes (e.g., by adding bikes or mopeds) or V2X communication could be on the agenda of the service operators. They might be also more collaboration between the different players and local authorities.

#2: Subscription as new form of leasing

Vehicle subscriptions will play a more important role in the coming years. Players in the different markets have raised significant amounts of capital in Series A and Series B financing rounds. This will be used to grow the customer base and to shape the market. Consumers are already used to subscribing services instead of

buying a product, this trend will spill over to the vehicle sector as well. Services are emerging for multiple vehicle types, from e-bike over mopeds to cars and vans. All with the focus to provide flexibility and comfort to consumers, in line with competitive total costs of ownership.

#3: Continued Electrification

Electrification of vehicles in private and also commercial use cases is set to increase. First signals are emerging that ride hailing platforms like Uber, Free Now or Lyft are intensifying their efforts to increase the share of electric vehicles used on their platforms. Stimulus programs in multiple countries are also creating more demand for electric vehicles as private cars. The availability of electric light commercial vehicles should also improve, followed by a much-needed electrification of the delivery and logistics sectors in urban areas. The trend is triggered by an increased pressure from cities and also used for marketing and PR purposes.

Dr. Florian Baumann

CTO (Specializing in Automotive & AI)
Dell Technologies
Unstructured Data Solutions

The year 2020 was a game-changing year both for OEMs and suppliers. In 2021, Automotive companies are focused on reducing costs, improving the developer's efficiency and productivity and on end-to-end solutions for AD/ADAS development purposes.

Apart from MLOps (Machine Learning Operations), DataOps becomes more important than ever before. The development environment needs a rich ecosystem of open-source tools and commercial solutions specific to the unique requirements of each automotive company.

Dell Technologies has put together the following map of workflow and possible ecosystem solutions. The complete DataOps lifecycle is illustrated to provide guidance in setting it up. More information can be collected from Dell Technologies Automotive [Landing page](#).



Marc Berg
CEO of
FREE NOW

Next year will be special. It is the year after the pandemic, when vaccines hopefully bring society back to any kind of normality. From my perspective, we will see the acceleration of existing trends and an increasing need for agility and flexibility of business models. Also, the need for flexible solutions for consumers will continue to grow after this time - as will the population in the cities. The trend that mobility platforms like ours will pave the way for people to move from A to B will lead to much more seamless and holistic journeys in the next few years. Customers demand flexible and individual mobility solutions - they want to move conveniently and at one click, similar to the various video- or music-on-demand services.

For us, the platform of the future is more than the combination of different individual mobility options like ride-hailing, car-sharing or e-scooters. It includes all players in the mobility sector, from the local public transportation systems to private citizens who own a vehicle that they offer to others whenever they don't need it.

The key to success is collaboration. Multimodal mobility platforms like us will contribute to a long-term shift in mobility, as no single provider will be strong enough to cover all shared mobility concepts.

Only a strong network that combines various providers in the market will have this ability.

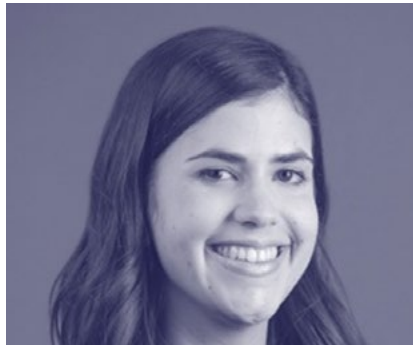
In the near future, locomotion will not only be about the way users get from A to B. Rather, we see the future of mobility in such a way that a platform aggregates all available data in order to offer the most intuitive and tailor-made user journey possible across many areas, which also includes external factors such as the weather forecast. We will integrate more and more data to offer a holistic experience for all our users.

This shift from personal car ownership to shared assets and Mobility as a Service in highly dense urban areas will allow for more sustainable use of public spaces, moving away from road expansions and parking spaces towards cycling lanes, tram lines, or playgrounds, reducing congestion and converting the city neighbourhoods into greener and liveable areas. At FREE NOW, it is our mission to empower smarter mobility decisions, help people to move freely and cities to thrive. We see ourselves as a strong partner for regions, and the closer we interact, leverage information, and collaborate, the more curated, efficient, and reliable will urban mobility concepts be in the future.



Cailin Crowe

Associate Editor
Smart Cities Dive



Spin have hosted challenges to improve micromobility infrastructure. As cycling activity continues to see gains across the U.S., local leaders will need to invest in the necessary infrastructure to meet the growing demand and keep people safe.

Cities will become smarter at the curb:

The pandemic has ushered in a new sense of urgency for cities to make sense of their curbs. Curbside competition has become even more intense over the past year as cyclists, food and e-commerce deliveries, and outdoor dining all compete for space. Cities are expected to continue adapting curbs to efficiently manage competing needs and recognize the space as an asset for uses outside of parking.

Autonomous delivery services will grace more city sidewalks:

It's been a momentous year for autonomous delivery technology, and 2021 will likely see those services advance even further. Tech companies like Starship Technologies and Nuro, for instance, have worked "overtime" this year to deliver goods and groceries. And governments have increasingly approved exemptions for companies to test their technologies in public.

Autonomous delivery technologies should only continue to grow as an emerging staple for the transport of goods in 2021.

Cities will support the cycling renaissance with more infrastructure:

Local leaders have witnessed a massive surge in cycling in 2020. Cities like Minneapolis and Oakland, CA, for instance, closed off their streets entirely to vehicular traffic to promote safer cycling, while operators including

MICROMOBILITY TAKES OVER URBAN MOBILITY AND TRANSPORT



LUIS SPERR

Investments and
Business Creation

The ongoing trend towards urbanisation will lead to two-thirds of the world's population living in cities by 2030. As a result, cities have to cope with emissions and air quality as well as congestion. Not in the future but today. Low to zero-emission micromobility vehicles will be a substantial part of the solution. Starting with the first- and last-mile, **micromobility will eventually take over a big part of all trips made today in urban areas.** This includes private and business trips as well as logistics and delivery transports.

At the same time, we're currently seeing tremendous traction for micromobility solutions especially in the field of last-mile logistics. Online shopping for groceries and household goods has seen skyrocketing demand with growth rates of more than 50% since the COVID-19 imposed lockdown. And even if such growth rates may not last in the long run, they will remain at a level we wouldn't have thought possible at the beginning of 2020.

Not-owning urban mobility

Services and not owning vehicles will be the new normal for urban mobility. The two main drivers of this development are the increasing trend towards urbanization and the lasting trend to consume services rather than owning things. What today is the standard in media consumption (e.g. Spotify, Netflix) is also increasingly gaining momentum in urban mobility. For several years now, mobility sharing providers got more and more traction. Although they were hit hard during the COVID-19 pandemic they will recover quickly. Indicators are the fast increase of shared mobility trips between the two lockdowns during this summer as well the investors' trust by spending hundreds of millions of Euros on the shared mobility operators during the pandemic.

Another impact of COVID-19 is the big increase of micromobility vehicles used for urban trips and commuting. Especially for ebikes, the trend to subscription-based business models is gaining momentum bringing a lot of advantages for the users. Replacement and maintenance services are included and provide fast and easy support in cases of theft and broken vehicles.

In the B2B sector, not owning vehicle fleets is already the standard and will be extended to micromobility vehicle types. Interestingly, the last-mile food delivery companies belonging to the main winners of COVID-19 pandemic sector are currently electrifying their micromobility fleets. This often goes hand in hand with the change to a Vehicle-as-a-Service business model.

Electrified scooters, mopeds and bikes are already widely used for short-haul trips replacing cars but even more so instead of public transportation. The latter is mainly driven by the COVID-19 pandemic but will remain on a high level in the future. Since cars will be more and more pushed out of cities due to regulation and zeitgeist, the key challenge is to seamlessly combine (and eventually merge) the public transportation system with micromobility solutions provided by 3rd parties. Cities such as Paris already conducted public tenders for shared micromobility operators with the goal to provide a holistic and well-orchestrated mobility offering for the citizens. Several recent multi-million Euro investments into micromobility operators confirm that this is the way to go.





Maya Ben Dror

Lead, Future Mobility Platform at World Economic Forum & Global New Mobility Coalition

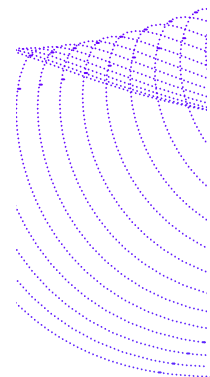


The coupling of pandemic recovery and electrification efforts in cities will intensify, with a focus on high-mileage vehicles like ride-hailing, taxis and delivery vehicles. By harnessing the power of these fleets, every dollar spent on the conversion of internal combustion engines to zero tailpipe emission vehicles will result in four times the carbon reduction compared with the average car. Backed by a joint effort by T&E, Uber, Renault Nissan, ABB, BP, Polis Network, GNMC and others, several cities are poised to lead the charge: Amsterdam, Lisbon, London, Madrid, Paris, Berlin and Brussels.

The 15-Minute City, coined by Professor Carlos Moreno and recently made mainstream by Paris' Mayor Anne Hidalgo, will be adapted by at least a handful of cities, tying recovery with local business growth, neighbourhood revival, and zero emission mobility. By meeting the educational, work, shopping, recreational and cultural needs of a growing population with increased human-powered mobility options for short distances complemented by efficient mobility as a service modes (transit, shared rides) for longer distances, cities and streets will be healthier and more resilient to shocks going forward. In these

cities, some of the 75% of public space, otherwise taken by parked vehicles and lanes, will maintain its revised use as pedestrianized, recreational or passenger or goods loading spaces, introduced due to the pandemic.

The technological sophistication of mobility hubs will intensify to accommodate an increasing number of users who seek a high-quality user experience as well as a greater variety of reliable and safe mobility options. Assisted by private sector innovators, cities will double down their investment to create a smooth and enjoyable transition between transport modes and dynamic mobility services – two trends that accelerated during the pandemic.



Siddhant Gupta

Head of Future Grid – Asia



1. Routed vehicles like public transport municipal buses and short-distance trucking will lead the transition to electric and subsequently to autonomous. Why:

- Optimized predictability of traffic conditions and preestablished routes will facilitate better planning and adoption of EV
- Lower fuel and maintenance cost playing a bigger role to reduced TCO
- Business model innovation such as Battery as a Service and further reductions in battery costs will make the cost to operator at par of diesel/petrol vehicle sooner

2. Battery technology and business model (1st and 2nd life) will drive charging infra deployment

- Extending life of battery beyond the 7-10 years within the vehicle in 2nd life battery applications will bring down EV costs
- 2nd life battery to then play a key role to overcome “localized grid challenges” for mass deployment of charging infrastructure

3. AI in Digital solutions around depot management and energy management will have the highest growth rate – early movers with significant advantage

- Challenges around utilization of infra, localized grid constraints, load shifting and demand for ‘green charging’ to be solved through AI models
- Increased uptake of digital solutions to counter behavioural challenges around EV charging discipline (dedicated lots)
- Increased demand for “green charging” to drive energy management to increase input % for renewables

4. Smart Autonomous Charging Depots -> With the introduction of autonomous electric vehicles, charging depots will become smart and autonomous, particularly for heavy duty vehicle fleets.

- Auto-park features to be deployed soon in heavier EVs, and coupled with opportunity charging to enable autonomous charging.
- Using artificial intelligence backed algorithms, depots, utilizing pantograph-like technology, will arrange and prioritize the vehicles to ensure readiness for their daily routing.

www.siemens.com.sg/emobility

SIEMENS



Lukas Neckermann

**Managing Director,
Neckermann Strategic Advisors**

After the great reset of 2020, mobility has gained new meaning for 2021 and beyond. It will emerge as an industry in its own right, and impact even more facets of our day-to-day lives. Some thoughts:

Electrification is a done deal:

Driven by vastly increased vehicle choice, some gentle governmental nudging, sufficient infrastructure, and most importantly, better vehicle economics, the EV is now approaching mainstream acceptance. 2021 will see fleets especially shift toward electrified and fully-electric vehicles (which we have previously called the "Corporate Mobility Breakthrough"). From an industry point-of-view, we can finally tick that box.

Mobility Value Chain:

As an industry, mobility in all its facets will finally come into its own. We see the emergence of a new value-chain for mobility – one that is not derivative of automotive or public transport. Tech suppliers (especially in and around autonomous and connectivity), manufacturers, systems & data, fleet management, mobility operators and mobility aggregators together represent a Trillion Dollar opportunity within this decade, and will be recognised as such, with a continuation of exciting funding-rounds and IPOs.

Integration and Disintegration:

Companies throughout our industry will re-evaluate their strengths and weaknesses within the mobility value-chain, as well as their key contributions to the industry. It's now clear that not one company – however large – can "own" the entire mobility space, as some have tried to do in the last half decade. In 2021, many more will spin-off or carve-out entities that don't yet have a clear view toward profitability (just as Uber has done with its autonomous, micromobility, and air transport operations, and some manufacturers have done with their mobility services units). This is leading to more consolidation and integration, achieving better unit economics and building stronger, more specialised companies.

Bricks and Mobility:

Finally, a yet even wider ecosystem of industries and facets of our lives will be impacted by mobility. After the rapid rise of Covid-induced bicycle and pedestrian infrastructure, as well as the emerging discussion on the "15-minute city", Neckermann Strategic Advisors expects real-estate developers and infrastructure investors to be a next frontier for the Mobility Revolution. In 2021, many more local governments and real-estate developers will re-evaluate their

use of urban space, implementing new facilities (lanes and parking) for bicycles, scooters, and even autonomous delivery and transport.

We look forward to the interactions with our clients, partners, and many friends across the industry – have a great, healthy, and successful 2021



Karolina Korth

**Chief Digital Officer,
Head of Strategy at
Siemens Mobility, Spain**

In order to offer the level of comfort that is comparable with a car, public transport will need to use real time data to be able to adjust its supply to a demand, to make needed changes in real-time, schedule, available routes and number of trains available.

Systematic collection, analysis and usage of data will decide if public transport will become modality of choice in the future and will be able to providing users with comfort and safety that they need.

Public transport and smart cities should not only target digital

natives, but use data and digital tools to customize the offering and make public transport inclusive and accessible for everyone.

We should allow each user to design trips reflecting their personal preferences, special needs or limitations. Thanks to digitalization we will be able to provide each user with information that is truly helpful (available escalators, trains with easy access) in the format that is the most convenient (e.g. spoken or visualized).

SIEMENS
Ingenuity for life





A. Cagri Selcuklu

Co-founder & CEO

Sharing economy has never been challenged this much. The world with corona is a different place but mobility is the same. We still need to go from point A to B. Maybe we cannot share the space, but we can share the services. This is why, already growing demand on Micromobility, will grow even more strongly for the coming years in urban environment. But now, there is more pressure on efficiency and economic aspects. Companies will focus on these topics on 2021. Efficient, green and user-friendly approaches will thrive.

That is one of the reasons why there is a bike boom but more specifically an E-bike boom. Since the pandemic started, now, some E-bike companies are the highest valued and top selling companies. The E-bike prices went down 4-fold in one year because of market economics, cities are defining more and more space for these vehicles. Countries are delivering generous incentives for people to buy these vehicles. This has been eye opening for people towards micromobility, right on top of the e-scooter boom. Pandemic will ease in 2021, people will go back

to their cars. But now we know, the curtain is down. So, it will not be back to old days. A big portion of those short distance rides we took with a ton of metal will never come back. Remember 80% of all car rides are shorter than 15km in distance.

With all these new micromobility vehicles in our cities, we need to consider the definition of infrastructure. For comparison, EVs need charging stations. Because they already have the roads, the rules and people are used to them. They are big vehicles, we only started to put electric in them instead of gas. They are sadly and mostly not shared. So, all you need

is to simply charge them but in micromobility, there are no definition of roads, rules are recently appearing, people are not used to them, they are all so light and open to vandalism and they are almost always shared vehicles. So, you need more than charging. That is why you need a universal solution for all modes of micromobility in one unified way; should help cities, 3rd party businesses, land owners, sharing operators to integrate in a smart & connected way, keep vehicles safe and ordered, make the operations more user friendly AND charge autonomously. That is why you will see more of DUCT (follow on LinkedIn) solutions across the globe starting 2021.



CEO and Co-Founder
at Future Mobility
Campus Ireland

futuremobilityireland.ie

Prediction 1: Further consolidation in the AV industry

There will be continued consolidation in the AV industry as start-ups and OEMs alike focus on near term targets such as electrification and the move towards a software defined vehicle in a bid to lower costs, hit sustainability targets and simplify vehicle complexity.

Prediction 2: The movement towards open cities during the Covid-19 will continue.

The genie is now out of the bottle with a realisation that long commutes and heavy traffic do not have to be a necessity of daily working life. This will transform our cities and its transportation systems but this is likely to have negative effects in the near term as operators struggle to adjust capacity to the changing demand.

Prediction 3: Two steps forward and one step back for EVs

This year will see many more electric options from mainstream car manufacturers, but with the likely increased EV volume on our roadways, the charging infrastructure will struggle to keep up. This chicken and egg will continue this year.



Thibaud Febvre

Co-Founder & COO

1. In the aftermath of Covid-19, cities will face a slow rebuild of demand for classic public transport as well as return of discretionary travel which supports much public transport use. This will create financial pressures re revenue as well as pressure to offer alternative means on travel

2. While micro-mobility is part of the perceived solution in many cities, they want to "build back better" and so will want a controlled, data-led, insight delivering set of shared micro-mobility solutions that deal with the range of challenges that they are now facing post Covid19.

3. The EU Green deal and aftermath of Covid19 put pressure clearly on the automotive industry to deliver on clean vehicles and prevent replacing petrol/diesel congestion with EV on road congestion. The industry is now - finally - rolling out lots of alternative EVs but the change will be to adopt models of car ownership and use that again "build back better" and cleaner and change cities in a way that supports a healthier, more sustainable - "Healthy Streets" / "15 minute" city way. If this is seen as not being delivered, governments

will increasingly be under pressure for more directive strategies to deliver sustainable streets.

4. Autonomous vehicles for personal use/ownership in a European context will be seen as a diversion from the core needs of delivering on sustainable cities. While AV will likely have shorter term roles in freight and even bus/tram operations, the widespread use in personal cars, will increasingly be seen as a diversion from the above goals of delivering on a sustainable city that supports the above issues of sustainable micro and macro-mobility.

5. In 2021 we will see at least one large-scale deployment of electric personal delivery devices ("sidewalk robots"), and a three-wheeled scooter as operators continue to tweak the form types.



CAN STAYING CLOSE TO HOME REVOLUTIONIZE THE (NEAR) FUTURE OF URBAN MOBILITY?

Almost overnight, cities faced an unprecedented problem resulting from COVID-19 prevention measures: keeping services, local economies, and essential workers moving with reduced public transit, ride share, and taxi. What solutions did cities overwhelmingly turn to? 600 cities (and counting) are deploying low-tech, low-cost solutions to repurpose existing streets and car parking spaces to ensure safe access to daily essential services. From Bogota to London, New York to Oakland, cities have implemented well-worn tactics of street experiments to help people move and get a breath of fresh air. This window of opportunity, potentially worth billions in health benefits, opens at least three predictions for the coming year(s):

Prediction #1: Renaissance of neighborhood centers

Living hyper-locally disrupts many intertwining aspects of urban space, mobility, and activity patterns. The shift disrupts the practice of commuting to a central business district and destination shopping (think Champs Elysée). This means neighborhood commercial nodes are being re-

energized and re-envisioned into what's called the "Fifteen-minute city" – the urban planner's century-old manifesto of sustainable development. This pivot requires flexible land use and zoning codes to match services with fluxing residents' needs, a keen eye on equity-driven decisions, and street designs that enable mobility by two feet or two wheels. (The more bicycle-like, the safer, more efficient, time competitive, and more fun.)

Prediction #2: Free the curb from cars

City officials and citizens are reimagining how street- and curb-space could and should be more fairly distributed and used. In place of car parking – which is overabundant, undercharged, and disproportionately benefits privileged, white urbanites – curb-side pick-up, street-eateries, outdoor dining, sidewalk extensions, slow streets, and bike lanes will continue to gain momentum. Echoing well-known facts, like most urban car trips are under 4 miles and the #1 global cause of death for kids and young adults is car crashes, calls have been made for street reform. Reducing urban space for cars is now more prescient than ever.

Prediction #3: Potential to revolutionize urban activity

If local amenities and services are increasingly within reach (#1) and "easy" to get to on two feet or two wheels (#2), then mobility demand would decrease and form around new patterns of local activity. Human-scale urban mobility options eventually out-compete the car and staying close to home confronts us with a new choice

structure – a balancing act of desires for services and "essential" needs, from buying groceries to walking in the park. The resulting activity patterns could revolutionize the ways we use, (re) design, and experience city streets and public spaces.

Meredith Glaser

Researcher at the
Urban Cycling Institute
University of Amsterdam



Meredith Glaser is a researcher at the Urban Cycling Institute at the University of Amsterdam, The Netherlands. Her research focuses on policy innovation, knowledge transfer, and capacity building for the transport planning field. Her work has been featured in a number of peer-reviewed journals and media sources. She is also one of the world's most experienced educators for professionals seeking to learn Dutch transport planning policies and practices. Meredith holds master's degrees in public health and urban planning from University of California, Berkeley.



Arianne Walker

Chief Evangelist for
Alexa Auto at Amazon

Artificial intelligence is going to help improve voice assistants to make the interaction even more natural and conversational. Our voice assistants will be able to maintain context and have a memory that helps us in our everyday lives – the voice interface in the vehicle will get good enough that it replaces our dependency on the smartphone.

Vehicles of the future will be designed with this in mind. While many vehicles today are doing a better job with microphones and noise elimination, this will be an integral part of vehicle design in the future.

Seamlessness of the voice assistant experience will be even more important in the future – being able to interact with your voice assistant of choice in multiple areas of our lives. To assist with this, interoperability between voice assistants will be critical, allowing people to get help from their preferred general voice assistant to interact with specialist voice assistants.

Urban
Cycling
Institute

amazon
auto





Aurélien Cottet

MaaS Project Leader at Transdev & Member of the Board of Directors at The MaaS Alliance

"5 MAAS PREDICTIONS:

1. MaaS in the next 3 years:

One of the rare benefic effects of the Covid-19 is the acceleration in the digitalization of many Public Transport Operations (Realtime traveler information, M-Ticketing, capacity information etc.). The backbone of the MaaS is the Mass Transport. If this one is not digitalized, you cannot deploy a MaaS. This digital acceleration is opening the door to test and learn MaaS initiatives/projects in many cities. The more data we will have on MaaS from different locations, the more we will be able to find the right business models for a financial sustainable MaaS operation(s)

2. MaaS Business Model(s):

In most of these medium cities you will find only one company per mobility service (one eBike company, one Carsharing brand etc.) that are managed by the city itself. So, for me, in these cities, the MaaS will become the extension of the Public Transport to improve the mobility of the residents and thus the first business model deployed will be B2G2C (Business to Government to Citizens) and it will be subsidized. Then you will have private companies that will provide a B2B2EE (Business to Business to Employees/Employers).

3. MaaS & Employee/Employers:

The employers will be the key in the success of MaaS, especially in medium cities. More than 90% the mobility is done by the daily local mobility, mainly by commuters. Without the employers, the MaaS won't take off. Many employers work on the wellbeing of their employees at work, but the life of an employee starts when she or he closes the door of her/his home to go to work. We start seeing big corporate proposing mobility budget to be spent in Public Transport or Shared Mobility. The MaaS will be the answer for the Human Resources to harmonize the mobility policies decided by the company for a better and more sustainable commute of its employees

4. MaaS & Real Estate:

We start talking about Mobility Hub around major Bus/Tram/Train stations, allowing people to park their car, bike, scooter before getting in the Public Transport or to use a shared mobility when getting out the PT. For me, I can see also micro-mobility-hub in private buildings, using the unused parking and storage places to allow people from outside to park, why not recharging their eV/eBike/eScooter, to manage the last & first mile(s) for deliveries. Here the MaaS will be the tool to manage the grid of all these micro-mobility-hub

5. MaaS & Traffic-lights:

Imagine that all the trip-planners on a territory (used by private car owners, by delivery drivers or by MaaS Travelers) are all connected to the same data-lack. This should represent the information of 70% of the trips planned. With such tool the territory will be able to manage its traffic lights dynamically in Realtime especially when unexpected incidents occur.

Micromobility Market Consolidation in Europe

Given the speed and timing of COVID, there has been a rapid transformation in the European micromobility market. According to recent news stories and press releases, many of the largest operators have been in active late stage fund raises to shore up their consumer offers, expand their fleets, and increase their geographic service areas. Namely, Tier, Voi, and Bolt have been the standout micromobility operators that have not only weathered the COVID financial storm, but have been able to attract massive equity capital investment, scale their operations, and aggressively hire across all business units. Lime is the one US-based operator in Europe that has been able to sustain their offer in Europe, albeit with investment by Uber and the caveat that 66% of their growth has occurred outside of their home US market. This has left the small to middle level micromobility operators in a bit of a cash crunch, due to 1.) lack of consumer brand recognition, 2.) lack of geographic coverage, and 3.) simply lacking the scale required to success in European cities that offer a transit rich and multi-modal environment. Therefore, we will see increased mergers and acquisitions of these operators and / or their divestment in the European market in the coming months ahead.

Robotaxis and Autonomous Deliveries

With the recent acquisition of Moovit by Intel, along with partnerships announced by Lyft, the Zoox driverless shuttle by Amazon, and a high level of activity already in China, we will

see continued growth in 2021. Over the past few years, the autonomous vehicle market went through a bit of a hype cycle, peaking in early 2018. Since that point, many OEMs, suppliers, startups, and investors have been scratching their heads wondering what will happen next. With the advent of COVID, social distancing, and public health measures, new use cases and opportunities rapidly opened up over the course of 2020. The market for shared and commercial autonomous vehicles has now eclipsed that for personal autonomous vehicles, thus the pivot towards robotaxis and driverless trucks. This will continue with rapid acceleration in investment, pilots, and commercial partnerships in the coming year. In addition, with widespread stay at home orders, quarantines, and curfews, the market for outdoor dining and home food deliveries has exploded. Therefore, we will see interesting value propositions from AI and mobility tech startups continue into 2021, related to human assisted and autonomous deliveries for parcels, packages, and even food to homes and businesses.

15 Minute Cities and Active Transportation

Finally, the most important trend and prediction for the year ahead in 2021 is the widespread adoption by governments of the policies related to '15 Minutes Cities'. What started initially in Paris, and coupled with a COVID-related expansion of the urban bike network to maintain social distancing and public health has taken the world by storm. Almost every major city now has an open street, pop up bike lane, widened pedestrian path, outdoor dining, and massive increase

in cycling and walking. While these policies have always been supported by urban planners and designers to reduce the impact of automobiles, COVID has served as the inflection point in which to enable cities to pursue more long term sustainability initiatives and active transportation infrastructure investments. While there has been limited pushback from certain individual and auto lobby groups (London and Berlin) towards active transportation measures, 2021 will see continued digital and physical infrastructure investments to support long term urban sustainable shifts away from the private automobile.

Scott Shepard

CMO @ Iomob





The millimetre wave exhibitor at Electronomous 2020

WHO WE ARE

We are Farran, your Irish millimetre wave solutions experts, based in Cork, Ireland for over 40 years.

WHAT WE DO

We develop innovative millimetre wave solutions for the world's leading companies and best-known brands, solving their complex challenges with our leading-edge technology that works first time, every time.

WHO DO OUR PRODUCTS CATER FOR?

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WANT TO KNOW MORE? tscanlon@farran.com

Whatever your business and product needs are, talk to our friendly team of experts at Farran today and begin your journey with us. We look forward to bridging your technology gap and helping your business reach new markets



www.farran.com



FREDRIKA KLARÉN

What is the project that most excites you in your space?

I'm really excited about Polestar Precept. It's our commitment car and now we've decided to put it into production. It's a great achievement and the start of a very meaningful journey for us.

What is the greatest challenge you see in Mobility/Smart Cities in the next 5 years?

Walking the talk and making a profound decline in the emissions connected to the production and use of cars. By 2025 we will have to be well on our way towards climate neutrality.

Which project do you think is the most audacious moonshot in the industry that you hope succeeds?

I have one in mind, but I can't talk about it right now :)

What are you most concerned about in Mobility/Smart Cities?

The lack of transparency and open source solutions in the car industry today. If we are to succeed we need to be able to talk openly and honestly about our shared challenges and cooperate more.

Which other person/company in the space of Mobility/SmartCities do you admire?

All of the consumers making the switch from ICE to EV, these are still early adapters who aren't afraid to learn something new in order for change to happen.

polestar



BARRY LUNN

CEO of Provizio

What is the project that most excites you in your space?

The application of long range sensors with AI on-the-edge to prevent collisions on our roads.

What is the greatest challenge you see in Mobility/Smart Cities in the next 5 years?

Moving from a car centric view of the world to a mobility as a service future presents a huge challenge with a lot of vested interests pulling in the opposite direction. But what an opportunity.

Which project do you think is the most audacious moonshot in the industry that you hope succeeds?

The end of private vehicle ownership would change everything and I hope it happens sooner rather than later. Autonomous vehicles, flying cars and other moonshot efforts all depend on this transition.

What are you most concerned about in Mobility/Smart Cities?

Safety. We as an industry have a safety record that should embarrass us all and I hope society, in a post Covid environment, decides enough is enough and pursues a safer, cleaner future.

Which other person/company in the space of Mobility/SmartCities do you admire?

Bryan Salesky and the Argo project have impressed me to date. Bryan appears to have a grounded approach to autonomous mobility and uses the word safety as much as he uses the word robotic. Quietly, slowly and safely will win the autonomy race which has been dominated by empty rhetoric to date.

Provizio



ANTHONY GERMANCHEV

Advanced Technologies Lab at the Australian Road Research Board

What is the project that most excites you in your space?

The project I am most excited about is working our partners who world leaders in machine vision, AI and the development of HD digital maps. I am excited to apply these technologies to improve safety and solve our transport problems.

What is the greatest challenge you see in Mobility/Smart Cities in the next 5 years?

The greatest challenge in mobility is the increase in congestion in and around our cities.

Which project do you think is the most audacious moonshot in the industry that you hope succeeds?

A project that was previously considered an audacious moonshot was to eliminate congestion, but COVID19 has given us the opportunity to re-imagine the way we work and in the process reduce congestion in our major cities.

What are you most concerned about in Mobility/Smart Cities?

The increasing cost of congestion and reduction in liveability and liveable spaces in our cities still remains a concern.

Which other person/company in the space of Mobility/SmartCities do you admire?

Mobileye continue to lead the way towards automated driving and EuroRAP (iRAP) are making significant improvements in road safety through the application of technologies and the star rating of roads.

arrb



DOMINIC PAPA

Vice President, Smart State Initiative Arizona Commerce Authority

What is the project that most excites you in your space?

Smart State Governance Framework

What is the greatest challenge you see in Mobility/Smart Cities in the next 5 years?

The ability for "smart regulation" to incentivize and keep up with the technological pace of mobility solutions.

Which project do you think is the most audacious moonshot in the industry that you hope succeeds?

Michigan's Connected Corridor with Sidewalk Infrastructure Partners

What are you most concerned about in Mobility/Smart Cities?

Silos across different levels of government (federal/state/city)

Which other person/company in the space of Mobility/SmartCities do you admire?

Trevor Pawl - Chief Mobility Officer, Michigan



ARIZONA
COMMERCE AUTHORITY



PAUL-ADRIEN CORMERAIS

Founder & CEO at pony

What is the project that most excites you in your space?
electric cargo bikes

What is the greatest challenge you see in Mobility/Smart Cities in the next 5 years?
development of cycling infrastructure

Which project do you think is the most audacious moonshot in the industry that you hope succeeds?
pony

What are you most concerned about in Mobility/Smart Cities?
conservative regulation

Which other person/company in the space of Mobility/Smart Cities do you admire?
VanMoof; Swapfiets; Véligo



pony

BRUNO AZEVEDO

Co-Founder and CEO of AddVOLT

What is the project that most excites you in your space?
Fully autonomous and all-electric refrigerated Semi-trailer, with electric recuperation axle

What is the greatest challenge you see in Mobility/Smart Cities in the next 5 years?
Cleaner and quieter goods distribution, namely the infrastructure needed to promote the adoption of electrified vehicles and with alternative fuels.

Which project do you think is the most audacious moonshot in the industry that you hope succeeds?
Autonomous truck

What are you most concerned about in Mobility/Smart Cities?
Driver's quality life

Which other person/company in the space of Mobility/Smart Cities do you admire?
There are very good examples of organizations which are promoting with their specialized teams a seamless good distribution which contributes for a better mobility of people and goods at inner cities. Companies like HAVI which is reusing the oil from fried potatoes that they collect from their customers to use to power their HVO Hybrid trucks which distributes the goods in electric mode at inner cities. Out of cities, those Trucks use the oil from fried potatoes to traction while it recharges the Truck's battery for the next quieter and cleaner inner city delivery. At same time it promotes a circular economy. Another relevant example is THT new cool which is renting semi-trailers equipped with refrigerated systems fully electric and autonomous powered by a battery which recharged at powergrid or by the trailer electric axle.

ADDVOLT



IÑAKI IGLESIAS AGUINAGA

Head of Technology and Innovation Futurist for Tecnalia

What is the project that most excites you in your space?
The development of a new type of air taxi more adapted to urban operations

What is the greatest challenge you see in Mobility/Smart Cities in the next 5 years?
Global optimization of the future multimodal transport to obtain a more energy efficient transport increasing the availability at the same time.

Which project do you think is the most audacious moonshot in the industry that you hope succeeds?
Fully autonomous cars

What are you most concerned about in Mobility/Smart Cities?
Multimodality optimization for achieving a safer and more energy efficient mobility ecosystem

Which other person/company in the space of Mobility/Smart Cities do you admire?
Richard Branson

tecnalia Inspiring Business



SHIN-PEI TSAY

Director of Policy, Cities & Transportation at Uber

What is the project that most excites you in your space?
low emission zones

What is the greatest challenge you see in Mobility/Smart Cities in the next 5 years?
outdated policies and practices standing in the way of shared goals like carbon reduction and increasing transportation access

Which project do you think is the most audacious moonshot in the industry that you hope succeeds?
100% zero emission transport platforms

What are you most concerned about in Mobility/Smart Cities?
lack of political will

Which other person/company in the space of Mobility/Smart Cities do you admire?
EV Hybrid Noire

Uber



VIOLETA BULC

EU Commissioner for Transport (Former) & Curator of ecocivilisation

What is the project that most excites you in your space?
Ecocivilisation

What is the greatest challenge you see in Mobility/Smart Cities in the next 5 years?
Absorption capacity

Which project do you think is the most audacious moonshot in the industry that you hope succeeds?
Mobility on demand

What are you most concerned about in Mobility/Smart Cities?
inclusion and standardisation for the benefit of all

Which other person/company in the space of Mobility/Smart Cities do you admire?
People behind MAAS



JAYESH JAGASIA

Host of the AI
in Automotive Podcast



What is the project that most excites you in your space?

Artificial Intelligence in Automotive & Mobility industries.

What is the greatest challenge you see in Mobility/Smart Cities in the next 5 years?

- 1) Crossing the chasm from concept to reality - both for mobility and smart cities.
- 2) Legal / policy-level support from Governments / local bodies will require a level of progressiveness that is often hard to find.
- 3) Competing with big industry players - as a mobility startup, how do you level the playing field or change the rules of the game?
- 4) Cultural - are people willing to change their behaviour? So far, this has proved to be easier said than done.

Which project do you think is the most audacious moonshot in the industry that you hope succeeds?

Making shared mobility (especially personal vehicles and commercial vehicles) a reality with the right price, proposition, value and consumer behaviour change drivers.

What are you most concerned about in Mobility/Smart Cities?

Too much fluff; too much vapourware with very little concrete stuff on the ground damages the credibility of the entire industry, including of those participants that have something tangible of value to offer

Which other person/company in the space of Mobility/SmartCities do you admire?

- 1) Arrival is doing a fantastic job in thinking ground up with a clean slate, what a van / bus should be.
- 2) What3words has an incredibly powerful proposition that straddles industries and segments and has the potential to be the world standard in addressing for the 21st century.



LINA KONSTANTINOPOULOU

EU Commissioner for Transport (Former)
& Curator of ecocivilisation

What is the project that most excites you in your space?

Safer road Infrastructure and its relation to Connected and Automated Driving

What is the greatest challenge you see in Mobility/Smart Cities in the next 5 years?

The impact on reducing road fatalities

Which project do you think is the most audacious moonshot in the industry that you hope succeeds?

CAVs driving in mixed traffic with conventional vehicles

What are you most concerned about in Mobility/Smart Cities?

Ensuring we can meet the Vision zero fatalities by 2050

Which other person/company in the space of Mobility/SmartCities do you admire?

Those companies that meet the UN SGs and at the same time innovate!



JEAN-CHRISTOPH HEYNE

Global Head of Future Grids at Siemens Smart Infrastructure



What is the project that most excites you in your space?

The full switch to electromobility, powered by 100% renewables. Curbing emissions from transport is crucial in the fight against climate change. We have the chance to redefine how people and goods are moved. Charging infrastructure must be made available everywhere and access and billing as intuitive as possible. The charging infrastructure should be efficient, which includes conversion efficiency as well as dynamic and parallel charging. Charging an electric vehicle must become as easy as charging a smart phone.

What is the greatest challenge you see in Mobility/Smart Cities in the next 5 years?

Population growth and urbanization are advancing rapidly. As our cities get larger and more densely populated, we have to ask ourselves, how our cities can become more human-centric. We need to minimize their impact, the air- and the noise-pollution, to make our cities more livable. The full electrification of transport in urban areas plays an important role. We have to electrify public transport, urban commercial transport and provide public charging infrastructure for those who do not have access to off-street parking. We need to start thinking differently about infrastructure – and reflect the changing needs and attitudes of today's world.

Which project do you think is the most audacious moonshot in the industry that you hope succeeds?

Autonomous driving will impact the future of mobility tremendously. It will help to reduce traffic and thus emissions. If the remaining vehicles can be electrified, even better. If we think a step further, than those electric self-driving vehicles could autonomously find their way to the next charging point. Which could be even located in a logistics center or depot outside the city. This again would free up space in our cities and make them more livable.

What are you most concerned about in Mobility/Smart Cities?

I'm most concerned about climate change and consequently also carbon emissions. There is no planet B, we must act now! Direct and indirect electrification have a huge potential in driving the decarbonization of our society. Electrification of transport is one field of action, electrical cooling and heating for example is another one. We have to look at energy efficiency and a more sustainable use of resources.

Which other person/company in the space of Mobility/SmartCities do you admire?

There is no single person I admire, since decarbonizing our society is not a one man or woman mission. I admire everyone that is willing to act on climate change and to do his or her fair share. It is in our nature to preserve the status quo, to stay right in our comfort zone. Which is why, I have a lot of respect for the people, communities, cities that proactively reduce carbon emissions or even aim to become carbon neutral. Change is never easy but there is no other option.

SIEMENS



FLORENCE MILNER

General Manager for the UK and Ireland at Lime

What is the project that most excites you in your space?

How to convert the 60% of <3m car journeys to walking, cycling, scooter or who another green mode

What is the greatest challenge you see in Mobility/Smart Cities in the next 5 years?

Infrastructure - decades have been spent making cities work for cars, how do we undo that

Which project do you think is the most audacious moonshot in the industry that you hope succeeds?

Car free city centres

What are you most concerned about in Mobility/Smart Cities?

Levels of infrastructure, also will to change

Which other person/company in the space of Mobility/SmartCities do you admire?

S-Park, a bike rack system that can use kinetic energy from cycling to charge batteries



VIK BHIDE

Director of The City of Tampa Mobility Department

What is the project that most excites you in your space?

MaaS and electrification

What is the greatest challenge you see in Mobility/Smart Cities in the next 5 years?

Attracting transit ridership

Which project do you think is the most audacious moonshot in the industry that you hope succeeds?

Open MaaS platform with mass-transit emphasis for mid to long trips

What are you most concerned about in Mobility/Smart Cities?

The ability for public and private sector mobility partners to establish a workable framework

Which other person/company in the space of Mobility/SmartCities do you admire?

Tesla



ALEX GILBERT

Senior Strategy Manager for Commercial Energy at Transport for London

What is the project that most excites you in your space?

Deploying EV chargepoints across the land to enhance our journey to an electric, low-carbon future

What is the greatest challenge you see in Mobility/Smart Cities in the next 5 years?

Governments that never stop arguing!

Which project do you think is the most audacious moonshot in the industry that you hope succeeds?

Connected Autonomous Vehicles (CAVs)

What are you most concerned about in Mobility/Smart Cities?

People not doing their homework before installing kit

Which other person/company in the space of Mobility/SmartCities do you admire?

The Dutch and Scandinavians



YVES-MICHEL LEPORCHER

Blockchain Technology Expert for Group Renault

What is the project that most excites you in your space?

Blokchain project called XCEED (eXtended Compliance End to End)

What is the greatest challenge you see in Mobility/Smart Cities in the next 5 years?

Converting Smart (technological) city to Connected (human) city

Which project do you think is the most audacious moonshot in the industry that you hope succeeds?

The integration project applied in MEDELIN

What are you most concerned about in Mobility/Smart Cities?

Increase transport usage efficiency and reliability for any and every citizen

Which other person/company in the space of Mobility/SmartCities do you admire?

Wu Chunfeng, chairman of Chengdu Aerospace Science and Technology Microelectronics System Research Institute Co., Ltd.



ADAM RIDGWAY

Senior Strategy Manager for Commercial Energy at Transport for London

What is the project that most excites you in your space?

Data-driven Mobility

What is the greatest challenge you see in Mobility/Smart Cities in the next 5 years?

CapEx vs. OpEx

Which project do you think is the most audacious moonshot in the industry that you hope succeeds?

Induction charging - smart roads within smart cities.

What are you most concerned about in Mobility/Smart Cities?

The time it takes for legislation to be approved, we live in a world where agility prevails and many start ups in the mobility space can adapt, where as the public sector may bottleneck to halt progression.

Which other person/company in the space of Mobility/SmartCities do you admire?

Rivian, LG, Bosch, Sono Motors
Matt Allen, Pivot Power
Niki Shields
Roger Atkins
Martin Eberhard and Marc Tarpenning (Tesla)

